

1. G.C. SHALL COORDINATE THE EXACT SANITARY SEWER, WATER, AND STORM SEWER BUILDING TIE-IN LOCATIONS WITH THE ARCHITECTURAL PLANS.
2. ALL UTILITY SERVICE LATERALS OR LINES, INCLUDING ELECTRIC, SHALL BE INSTALLED UNDERGROUND PER SECTION 36.2-610. WATER & SEWER CONNECTIONS SHALL CONFORM TO WWA UTILITY STANDARDS AND INTERNATIONAL BUILDING CODE.
3. THE G.C. SHALL COORDINATE TEMPORARY POWER FOR THE PROPOSED BUILDING AS REQ'D.

1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST WYMA DESIGN AND CONSTRUCTION STANDARDS.
2. THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE WESTERN VIRGINIA WATER AUTHORITY IN WRITING AT LEAST THREE (3) DAYS PRIOR TO ANY CONSTRUCTION. PLEASE CONTACT MARK SINK AT (540) 537-3460.
3. ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE WESTERN VIRGINIA WATER AUTHORITY.
4. FIELD CORRECTIONS SHALL BE APPROVED BY THE WESTERN VIRGINIA WATER AUTHORITY PRIOR TO THE START OF CONSTRUCTION.
5. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18" CLEARANCE VERTICALLY AND 2' MINIMUM HORIZONTALLY FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE AT ALL WATER, SANITARY SEWER CROSSINGS OF ANY OTHER UTILITIES. WHERE THIS CANNOT BE ACHIEVED ADDITIONAL MEASURES IN ACCORDANCE WITH WYMA STANDARDS SHALL BE ENFORCED.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL EXISTING UTILITIES LOCATED AND POHOLED TO VERIFY LOCATIONS. THIS PLAN REVIEW DOES NOT REMOVE THE OWNER'S RESPONSIBILITY TO RELOCATE ANY UNKNOWN EXISTING CONFLICTS FOUND DURING CONSTRUCTION WITH THE PROPOSED UTILITY CONSTRUCTION.
7. REFER TO PLAN SET AND WYMA DETAILS FOR SPECIFIC CONSTRUCTION STANDARDS.
8. ALL PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE RESTORED BASED ON THE CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS.

1. ALL WATER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY. G.C. SHALL PROVIDE ALL MATERIALS REQUIRED FOR THE PROPOSED WATERLINE INCLUDING THE TAPPING SLEEVE AND VALVE. WWA TO PERFORM THE ACTUAL TAP ON THE EXISTING WATERLINE.
2. ALL WATER AND SANITARY SEWER FACILITIES ARE TO BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS.
3. G.C. SHALL PROVIDE 5 DAYS NOTICE TO THE WWA FOR ANY ANTICIPATED WATER OUTAGE TO ALLOW THE WWA TIME TO SCHEDULE AND NOTIFY AFFECTED CUSTOMERS. (540) 537-3460
4. CONTRACTOR TO FURNISH AND INSTALL ALL MATERIALS, TAP TO BE MADE BY WWA. CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION AND SHORING PER OSHA REGULATIONS.

1. ALL SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
2. ALL WATER AND SANITARY SEWER FACILITIES ARE TO BE INSTALLED ACCORDING TO THE WESTERN VIRGINIA WATER AUTHORITY DESIGN AND CONSTRUCTION STANDARDS
3. SANITARY SEWER TAP TO EXISTING MANHOLE TO BE MADE BY CONTRACTOR AND COORDINATED WITH W.V.W.A. MANHOLE CONNECTION MUST BE CORED WITH A FLEXIBLE BOOT INSTALLED.

1. G.C. SHALL PROVIDE A 3200 SERIES OR ABOVE KNOX BOX AS SHOWN ON THE PLAN SET PER THE FIRE MARSHALL'S OFFICE, CONTACT THE FIRE MARSHALL'S OFFICE AT 540-853-2795 FOR ORDERING INFORMATION. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS ON SPECIFIC MOUNTING LOCATIONS, ETC.
2. THE PROPOSED BUILDING SHALL HAVE SPRINKLER SERVICE. G.C. SHALL BE RESPONSIBLE FOR PROVIDING A P.I.V., FIRE DEPARTMENT CONNECTION, KNOX BOXES, AND IN-GROUND WATER VAULT FOR THE DOMESTIC WATER METER, AND DOUBLE DETECTOR CHECK FOR THE FIRE SERVICE.
3. A FIRE HYDRANT SHALL BE LOCATED WITHIN 250' OF THE MOST REMOTE PART OF BUILDING. BUILDING HAS MIXED OCCUPANCY USE GROUPS TO INCLUDE B AND S-1 WITH TYPE II-B CONSTRUCTION.
4. S USE GROUPS LESS THAN 20,000 SF SHALL REQUIRE 2,500 GPM OF FLOW FROM THE FIRE HYDRANTS THAT SERVE THE SITE.
5. EACH FIRE DEPARTMENT CONNECTION (FDC) IS REQUIRED TO HAVE A KNOX BOX LOCKING CAP INSTALLED WITH SINGLE 5" STORZ COUPLING AND A 30' ELBOW. PLEASE CALL THE NUMBER LISTED ABOVE IN NOTE #1, OR VISIT [WWW.KNOXBOX.COM](http://WWW.KNOXBOX.COM) FOR ORDERING INFORMATION.
6. A KNOX GATE SWITCH SHALL BE PROVIDED FOR DROP BEAM SECURITY GATE "A" IN THE SALES DISPLAY LOT.

BLDG.	10	LF OF 4" PVC SDR-35 AT 1.04% (INV. AT BLDG. 1081.00)
(L)		S.S. CO. PRIVATE (TRAFFIC-BEARING LID) TOP=1085.30 INV.=1081.00
(L)	26	LF OF 4" PVC SDR-35 AT 1.92% TOP=1085.30 INV.=1080.50
(K)		S.S. CO. PRIVATE (TRAFFIC-BEARING LID) TOP=1085.30 INV.=1080.50
(K)	8	LF OF 4" PVC SDR-35 AT 1.25%
BLDG.	14	LF OF 4" PVC SDR-35 AT 1.04% (INV. AT BLDG. 1081.00)
(J)		OL/WATER SEPARATOR TOP=1080.00 INV. IN=1080.80 OUT=1080.80
(J)	6	LF OF 4" PVC SDR-35 AT 1.66%
(I)		S.S. CO. PRIVATE (TRAFFIC-BEARING LID) TOP=1080.00 INV.=1080.40
(I)	30	LF OF 4" PVC SDR-35 AT 1.40%
BLDG.	24	LF OF 4" PVC SDR-35 AT 1.04% (INV. AT BLDG. 1081.50)
(H)		S.S. CO. PRIVATE (TRAFFIC-BEARING LID) TOP=1083.30 INV.=1081.30

<p>△ VDOT STD DI-3C CURB INLET (8' THROAT) TOP:1086.29 INV. IN: 1082.10 (#1B) INV. IN:1082.10 (#1D) INV. OUT:1082.00</p>	<p>△ 139 LF OF 30" TYPE S HDPE PIPE AT 1.84% INVT:1077.50 (#17) VDOT STD DI-7 GRATE INLET (TYPE 1 GRATE) TOP:1083.00 INV. IN: 1077.50 (#17) INV. IN:1075.36 (#12) INV. OUT:1075.26</p>
<p>△ 129 LF OF 15" TYPE S HDPE PIPE AT 2.0% INVT:1077.50 (#17) VDOT STD DI-3C CURB INLET (6' THROAT) (72" MANHOLE) TOP:1084.09 INV. IN:1080.01 (#13) INV. IN:1079.42 (#2) INV. IN:1077.90 (#3B) INV. OUT:1077.80</p>	<p>△ 144 LF OF 30" TYPE S HDPE PIPE AT 2.13% INVT:1077.50 (#17) VDOT STD MH-2 TOP:1079.36 INV. IN:1068.75 (#20A) INV. OUT:1068.65 (#21)</p>
<p>△ 214 LF OF 18" TYPE S HDPE PIPE AT 1.00% INVT:1077.50 (#17) VDOT STD DI-3B CURB INLET (6' THROAT) TOP:1082.38 INV. IN:1078.25 (#5B) INV. IN:1075.65 (#4) INV. OUT:1074.65</p>	<p>△ 40 LF OF 30" CLASS III RCP PIPE AT 6.14% VDOT STD MH-2 MH TOP:1071.63 INV. IN:1066.21 (#21) INV. IN:1066.31 (#26B) INV. OUT:1066.11</p>
<p>△ 25 LF OF 18" TYPE S HDPE PIPE AT 0.97% INVT:1077.20 ADS MC-4500 UNDERGROUND CHAMBER SYSTEM W/WEIR WALL &amp; ORIFICE (SEE INSTALL ON SHEET 14.0 FOR SPECIFIC ELEVATIONS)</p>	<p>△ 11 LF OF 30" CLASS III RCP PIPE AT 1.00% VDOT STD DI-1 GRATE INLET TOP:1069.50 INV. IN:1066.00 INVT:1065.69 VDOT STD DI-5 GRATE INLET (TYPE III GRATE) TOP:1082.50 INV. IN:1076.90</p>
<p>△ 110 LF OF 6" SCH. 40 PIPE AT 2.1% W/ 3" RCP BEARING CLEANOUTS INV. IN:1082.85 INV. OUT:1081.20 VDOT STD DI-1 GRATE INLET TOP:1084.55 INV. IN:1081.20 INV. OUT:1080.20</p>	<p>△ 230 LF OF 15" CLASS III RCP PIPE AT 2.12% VDOT STD MH-2 MH TOP:1076.05 INV. IN:1072.04 INV. OUT:1071.94</p>
<p>△ OMITTED FROM PLAN SET</p>	<p>△ 229 LF OF 15" CLASS III RCP PIPE AT 2.46% VDOT STD DI-7A GRATE INLET (TYPE II GRATE) TOP:1089.81 INV. IN:1085.31</p>
<p>△ OMITTED FROM PLAN SET</p>	<p>△ 292 LF OF 15" CLASS III RCP PIPE AT 3.46% VDOT STD DI-3B CURB INLET (8' THROAT) TOP:1080.48 INV. IN:1075.22 INV. OUT:1075.12</p>
<p>△ 107 LF OF 15" TYPE S HDPE PIPE AT 2.53% INVT:1077.50 (#17) VDOT STD DI-2B CURB INLET (6' THROAT) TOP:1080.47 INV. IN:1076.37</p>	<p>△ 9 LF OF 15" HDPE PIPE AT 15.44% INVT:1077.50 (#17) VDOT STD DI-3B CURB INLET (8' THROAT)</p>
<p>△ 87 LF OF 6" SCH. 40 PIPE AT 2.0% W/1 TRAFFIC BEARING CLEANOUT INV. IN:1081.75 INV. OUT:1080.01 VDOT STD MH-2 MH BASE W/ OPEN TOP &amp; TRASH RACK TOP:1083.98 INV. IN:1079.00</p>	<p>△ 92 LF OF 30" TYPE S HDPE PIPE AT 1.03% VDOT STD DI-7 GRATE INLET (TYPE 1 GRATE) TOP:1087.98 INV. IN:1078.00 INV. OUT:1077.90</p>

▽ VDOT STD'D DI-1 GRATE INLET  
 TOP:1090.00  
 INV. OUT:1086.50  
 ▽ 96 LF OF 15" TYPE S  
 HDPE PIPE AT 4.61%  
 ▽ VDOT STD'D DI-1 GRATE INLET  
 TOP:1089.50  
 INV. OUT:1086.00  
 ▽ 79 LF OF 15" TYPE S  
 HDPE PIPE AT 4.98%  
 ▽ VDOT STD'D DI-1 GRATE INLET  
 TOP:1088.00  
 INV. OUT:1084.00  
 ▽ 90 LF OF 15" TYPE S  
 HDPE PIPE AT 6.77%  
 ▽ VDOT STD'D DI-1 GRATE INLET  
 TOP:1082.25  
 INV. OUT:1078.75  
 ▽ 45 LF OF 15" TYPE S  
 HDPE PIPE AT 1.11%  
 ▽ VDOT STD' 72" DROP MH  
 TOP:1080.70  
 INV. IN:1072.20 (#6)  
 INV. IN:1075.00 (#30)  
 INV. OUT:1073.92 (BYPASS MANIFOLD)  
 INV. OUT:1072.00 (ISOLATOR ROW)  
 ▽ VDOT STD' 72" MH  
 TOP:1081.00  
 INV. IN:1072.20 (#19)  
 INV. IN:1072.00 (ISOLATOR ROW)  
 INV. IN:1073.92 (CHAMBER)  
 INV. OUT:1073.92 (CHAMBER)  
 ▽ 10 LF OF 30" TYPE S  
 HDPE PIPE AT 2.61%  
 ▽ 4X7' CONC. MONOBOX STRUCTURE  
 W/ WEIR WALL (SEE WEIR WALL NOTE)  
 TOP:1079.50  
 17' ORICE @ WEIR WALL:1069.00  
 TOP OF WEIR WALL:1074.15  
 INV. IN:73.92 (CHAMBER)  
 INV. IN:1072.27 (CHAMBER)  
 INV. IN:1072.27 (CHAMBER)  
 INV. IN:1069.00 (UNDERDRAIN)  
 INV. OUT:1069.00 (#20A)  
 ▽ VDOT STD' 72" MH  
 TOP:1079.50  
 INV. IN:1074.03 (#32)  
 INV. OUT:1073.92 (CHAMBER)  
 INV. OUT:1072.00 (ISOLATOR ROW)

NOTES:

1. VDOT STD IS-1 INLET SHAPING SHALL BE PROVIDED IN ALL PROPOSED STRUCTURES
2. NON-SHRINK GROUT SHALL BE USED FOR ALL STORM SEWER PIPE CONNECTIONS.
3. STORM SEWER LOCATED IN PUBLIC RIGHT OF WAY OF PETERS CREEK ROAD, IS REQUIRED TO HAVE WATER TIGHT, GASKETED JOINTS.

1. G.C. TO CONFIRM & COORDINATE THE BUILDING TIE-IN LOCATION AND ELEVATION WITH H.E.P. AND ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION OF LATERAL.

2. G.C. TO CONFIRM THE TIE-IN LOCATION AND ELEVATION TO THE EXISTING MANHOLE PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

3. G.C. SHALL CORE DRILL THE EXISTING MANHOLE AND PROVIDE A FLEXIBLE BOOT CONNECTION FOR THE PROPOSED CONNECTION.

A graphic scale bar and a north arrow. The scale bar is marked with 0, 30, and 60 feet. Below the bar, it reads "SCALE: 1" = 30'". The north arrow points towards the top right of the page.

NOTE: SEE PLUMBING DRAWINGS FOR EXACT UTILITY CONNECTION LOCATIONS AT THE BUILDING. LOCATIONS SHOWN ON THIS PLAN ARE FOR GENERAL COORDINATION PURPOSES ONLY AND SHOULD BE VERIFIED PRIOR TO INSTALLATION.

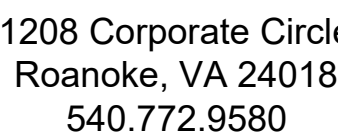
NOTE: CONTRACTOR TO SEE ELECTRICAL DWGS.  
FOR COORDINATION WITH SITE LIGHTING,  
TELECOMMUNICATIONS REQUIREMENTS.

1. PETERS CREEK ROAD, N.W. (ADJACENT TO PROPOSED ENTRANCE)  
AUTHORITY I.D.: 13010  
STATIC: 77 PSI  
RESIDUAL: 69 PSI  
FLOW AT 20 PSI: 3,689 GPM  
(FLOWS PER W.V.W.A. FLOW TEST)

1. WEIR WALL SHALL BE CONSTRUCTED OF 8" GROUT FILLED BLOCK W/ REBAR REINFORCEMENT & BLOCK DOWELED INTO SIDEWALLS OF BOX.
2. ORIFICE PLATE SHALL BE 1/4" STEEL, BOLTED IN PLACE & SEALED FOR WATERTIGHT CONNECTION.

1. (2) 3/4" PVC CONDUIT FROM BUILDING TO FREESTANDING SIGN
2. (2) 5" PVC CONDUIT FROM NEW OH UTILITY POLE TO PAD MOUNTED TRANSFORMER
3. (2) 5" PVC CONDUIT FROM PAD MOUNTED TRANSFORMER TO BLDG. ELECTRICAL METER
4. (2) 2" PVC CONDUIT FOR COMMUNICATIONS
5. (1) 1" PVC CONDUIT FROM BUILDING TO LIGHT POLES AS REQUIRED

Christopher Plecker  
7-29-2021



**SHEET NO.** **C5.0**

**STORE NO. 6154  
2839 PETERS CREEK ROAD  
ROANOKE, VA 24019**

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C5-0